

CLAIMS

- 5 1. A process for an unseating test for a mounted rolling assembly comprising a rim, a tire without an inner-tube ("tubeless"), an inner cavity of the tire being inflated to a predetermined inflation pressure, comprising:
- on a testing machine, applying a force on the tire with a test surface until unseating of the tire from the rim begins at a bead of the tire; and
- noting the force applied and the inflation pressure of the inner cavity of the tire, wherein, on the machine, the force is transmitted to at least a tread of the tire.
- 10 2. A process according to Claim 1, wherein, before unseating, a shoulder and a sidewall of the tire come into contact with the test surface.
3. A process according to Claim 1, wherein a start of the unseating is detected by an audible hissing of air escaping from the inner cavity of the tire.
- 15 4. A process according to Claim 1, wherein the force and the inflation pressure are recorded continuously, including beyond a starting point of unseating.
5. A process according to Claim 1, wherein the force is exerted on a crown of the tread and has at least one tangential component other than zero.
6. A process according to Claim 1, wherein a normal component of the force is zero and a coefficient of tire/test surface friction is substantially infinite.
- 20 7. A process according to Claim 1, wherein longitudinal and normal components of the force are zero, and a tangential component of the force is merged with a transverse component of the force.
8. A process according to Claim 5, wherein a longitudinal component of the force is not zero, the process including applying a driving or braking torque to at least one of the wheel and the rim.

9. A process according to Claim 1, wherein the process is static and includes arranging a rolling assembly on the test surface and subjecting the rolling assembly to a normal test force, applied to the crown of the tread, by at least one compression means.
- 5 10. A process according to Claim 9, wherein the surface used is a plate adapted to adjust the coefficient of friction between the tread of the tire and said surface.
11. A process according to Claim 1, wherein the process is dynamic and includes applying the force by causing the rolling assembly to roll on the test surface and imposing a drift relative to the test surface.
12. A process according to Claim 11, wherein the test surface includes a rotatable cylinder.
- 10 13. A process according to Claim 11, wherein the test surface includes a rolling plate and a strained-air film plate.
14. A process according to Claim 11, wherein the rolling assembly is mounted on the test surface at a non-zero drift angle.
- 15 15. A process according to Claim 14, wherein the rolling assembly is mounted on the test surface at a non-zero camber angle.
16. A process according to Claim 15, wherein the rolling assembly is mounted on the test surface at a caster angle.
17. A machine for a tire unseating test, comprising a test surface for transmitting a test force to at least a portion of a tire tread intended to be in contact with the test surface, means for detecting a moment of unseating, and means for continuously recording the test force applied and an inflation pressure of the tire.
- 20 18. A machine according to Claim 17, wherein the test surface is part of a test drum on which the tire is adapted to be positioned and caused to roll.

19. A machine according to Claim 17, wherein the test surface includes a surface having a plane surface on which the tire is caused to roll.
- 20 A machine according to Claim 19, wherein said plate is formed of a first microperforated fixed plate, comprising a number of microperforations into which a gas is injected under pressure, and a second solid plate which is displaceable and is in contact with the tire by a contact line, the two plates being mounted such that there is a gap between them.
- 5